ROUTING SYSTEMS AND METHODS FOR IMPLEMENTING ROUTING POLICY WITH REDUCED CONFIGURATION AND NEW CONFIGURATION CAPABILITIES

Abstract of the Disclosure

In some embodiments, a method and routing system parameterize a routing policy and apply the parameterized-routing policy to a route. Parameters are assigned to at least some policy statements of the policy. The parameterized policy may be called with parameters stored in a parameter table. In some embodiments, common blocks of the policy may be identified and assigned parameter sets. A commonized routing policy may be reused within more than one policy.

In some embodiments, a method and routing system may evaluate a configuration file to determine relationships between route attributes. The relationships may be expressed in one or more mathematical functions, and when a route is received from a peer, the attributes of the route may be modified based on the mathematical functions.

In some embodiments, a router and method for implementing routing policy and traffic engineering are provided. Routing policy may be implemented by performing a policy translation on a policy configuration to generate an internal-policy representation. Attribute-operator pairings of the internal-policy representation may be verified with one or more client dynamic load libraries (DLLs). When the attribute-operator pairings have been verified, the internal-policy representation may be compiled and stored in a system database. A client protocol may be notified that the routing policy has been modified.